12 Dets

XBBXX8

12

EPA-R6-2013-010211

#### SWMU 19 - Tank Car Shells

<u>Suggested Further Action</u>: No further action is suggested at this time.

Reason: This unit is no longer in existence. Determination of how this unit was closed and where the tank car shells were removed to is suggested to verify that there has not been or is not an ongoing release of hazardous constituents from the components of this former unit.

### SWMU 20 - Retention Tank

<u>Suggested Further Action</u>: No further action is suggested at this time.

Reason: This unit is totally enclosed and is situated on a concrete pad inside the production containment area (concrete diking).

### SWMU 21 - Drumming Area Trench System

<u>Suggested Further Action</u>: No further action is suggested at this time.

Reason: This unit is constructed of concrete.

Supplemental Information: An assessment of air releases from this unit may be warranted in order to determine if hazardous constituents are being released at significant levels. Routine verification of the integrity of the Trench is suggested.

### SWMU 22 - Process Area Trench System

<u>Suggested Further Action</u>: No further action is suggested at this time.

Reason: This unit is constructed of concrete.

<u>Supplemental Information</u>: Routine verficiation of the integrity of the Trench is suggested. An assessment of air releases from this unit may be warranted in order to determine if hazardous constituents are being released at significant levels.

## SWMU 23 - Sewer System

Suggested Further Action: An RFI is suggested for this unit.

Reason: This unit is located underground and its integrity could not be evaluated during the VSI. However, due to the age of the unit (approximately 25 years) and the types of waste managed, this unit may be a contributor to known subsurface contamination.

<u>Supplemental Information</u>: An investigation to determine the integrity of this unit may be warranted in order to evaluate the potential for release of hazardous constituents.

# Area of Concern A - Tank Car Loading/Unloading Area

<u>Suggested Further Action</u>: Further investigation appears warranted for this unit.

Reasons: This area is a designated area for unloading products such as pitch, creosote and fine oils. During the VSI, spills were observed on the soils in this area. Soil

sampling is suggested to determine if hazardous constituents have been released to this media. If so, a groundwater investigation may be warranted.

<u>Supplemental Information</u>: Clean-up of spills on the soils around the railroad tracks may be warranted in order to prevent releases of hazardous constituents to soil/groundwater, surface water and air.

#### Area of Concern B - Tank Farm Area

Suggested Further Action: Further investigation is warranted for this unit.

Reasons: Corrective action for this unit is currently being planned under the direction of TWC. Groundwater monitoring for this unit has been initiated and is currently in progress. However, the extent of remediation has not been established.

<u>Supplemental Information</u>: Interim removal of wastes from this unit may be warranted in order to prevent releases of hazardous constituents to soil/groundwater, surface water and air. In addition, an assessment of air quality for this unit may be warranted to determine if hazardous constituents are being released at significant levels.

#### 8.0 REFERENCES

- Correspondence: Koppers Company, Inc., to Texas Water Pollution Control Board. Re: Analyses of samples.
   July 31, 1963.
- 2. Inter-Office Correspondence: State Department of Health. Re: Waste Discharge Permit Application Recommendations. October 21, 1963.
- 3. Correspondence: Koppers Company, Inc., to City of Houston. Re: Letter of Mr. David B. Lee. February 5, 1965.
- 4. Correspondence: Armco Steel Corporation to Texas

  Water Pollution Control Board. Re: Koppers Company

  Incorporated Permit #01034. July 10, 1967.
- 5. Correspondence: Koppers Company, Inc., to State

  Health Department. Re: Process changes at Koppers

  plant. February 28, 1967.
- Engineering Report: Koppers Company, Inc. May 11,
   1967

- 7. Texas Water Quality Board: Industrial Water Discharge Report. December 9, 1969.
- 8. Inspection Report: Koppers Company, Inc. July 17, 1972.
- 9. InterOffice Memorandum: Texas Water Quality Board.
  Re: Inspection of Koppers Company. August 14, 1972.
- 10. InterOffice Memorandum: Texas Water Quality Board.
  Re: Koppers Company. November 19, 1973.
- 11. Texas Water Quality Board: Application for Waste Control Order. Koppers Company, Inc. November 7, 1975.
- 12. A Conceptual Design Report for Storm Runoff and Waste-water Treatment Facilities. Koppers Company, Inc.
  May 5, 1978.
- 13. Texas Department of Water Resources: Notice of Registration. November 27, 1978.
- 14. U.S. Environmental Protection Agency: Notification of Hazardous Waste Activity. August 18, 1980.

- 15. U.S. Environmental Protection Agency: General Information. November 19, 1980.
- 16. U.S. Environmental Protection Agency: Application for Permit to Discharge Wastewater. April 1, 1981.
- 17. Correspondence: U.S. Environmental Protection Agency
  to Texas Department of Water Resources. Re:
  Reconnaissance Inspections Koppers Company. July
  27, 1981.
- 18. U.S. Environmental Protection Agency: Identification and Preliminary Assessment. Re: 15 acres, 29° 45' 08" N Latitude, 95° 12' 41" W Longitude. September 18, 1981.
- 19. Correspondence: U.S. Environmental Protection Agency to Koppers Company, Inc. Re: Completed Processing Part A. July 27, 1981.
- 20. Form A General Facility Information, Koppers Co., Inc. August 14, 1981.

- 21. Potential Hazardous Waste Site, Koppers Company, Inc. September 25, 181.
- 22. Correspondence: U.S. Environmental Protection Agency to Koppers Company, Inc. Re: Copy of Inspection Report. November 17, 1981.
- 23. InterOffice Memorandum: Texas Department of Water

  Resources. Re: Koppers Company, Inc. March 16, 1982.
- 24. Correspondence: Koppers Company, Inc. to Texas

  Department of Water Resources. Re: Response to

  Notice of Deficiency. December 3, 1984.
- 25. Texas Department of Water Resources Permit

  Application. Re: Koppers Company, Inc., Permit No.

  WQ-01034. January 12, 1981.
- 26. Effluent Discharge Permit Proposed by Texas Department of Water Resources for Koppers Co., Inc. By Andrew C. Middleton, Ph.D. January 11, 1982.
- 27. Texas Department of Water Resources Industrial Solid
  Waste Disposal Compliance Monitoring Inspection.
  Koppers Company, Inc. February 25, 1982.

- 28. InterOffice Memorandum: Texas Department of Water

  Resources. Re: Koppers Company, Inc. March 16, 1982.
- 29. Texas department of Water Resources Notice of
  Registration Industrial Solid Waste
  Generation/Disposal. Koppers Company, Inc. July 21,
  1982.
- 30. InterOffice Memorandum: Texas Department of Water
  Resources. Re: Application No. 20220, Amendment to
  Permit No. 02034, Koppers Company, Inc. November 10,
  1982.
- 31. Correspondence: Koppers Company, Inc., to Texas

  Department of Water Resources. Re: NPDES Permit

  #TX0005096. December 13, 1982.
- 32. Compliance Summary, Koppers Company Permit No. 01034.

  December 31, 1982.
- 33. Correspondence: Koppers Company, Inc., to Texas department of Water Resources. Re: Status Report. February 21, 1983.

- 34. Industrial Solid Waste Closure and Post-Closure Compliance Review Checklist. 1983.
- 35. Correspondence: Law Engineering Testing Company to
  Koppers Company. Re: Installation of Ground Water
  Monitoring Wells Biological Sludge Lagoon. January 7,
  1983.
- 36. Texas Department of Water Resources Industrial solid
  Waste Disposal Compliance Monitoring Inspection.
  Koppers Company, Inc. July 11, 1983.
- 37. Loss of Interim Status Region VI EPA. Koppers Company, Inc. 1983.
- 38. Loss of Interim Status Region VI EPA. Koppers Company, Inc.
- 39. Houston Plant Closure Plan. Koppers Company, Inc. 1983.
- 40. Correspondence: Law Engineering Testing Company to Koppers Company, Inc. Re: Installation of Ground Water Monitoring Wells Biological Sludge Lagoon.

  January 7, 1983.

- 41. Texas Water Commission Permit to Dispose of Wastes.

  Re: Koppers Company, Inc. June 30, 1980.
- 42. Texas Department of Water Resources Municipal
  Industrial Supplement. Re: Koppers Company, Inc.
  January 4, 1985.
- 43. Correspondence: Texas Department of Water Resources
  to Koppers Company, Inc. Re: Annual Compliance
  Inspection, Permit No. 01034. January 21, 1985.
- 44. Correspondence: Koppers to Texas Department of Water Resource. Re: Annual Compliance Inspection Permit #01034. February 18, 1985.
- 45. Part I, Page 2 of 21 Permit No. TX0005096. 1985
- 46. Correspondence: Koppers to Texas Department of Water Resources. Re: TDWR Permit #01034. July 30, 1985.
- 47. Correspondence: Texas Department of Water Resources
  to Koppers Company, Inc. Re: ISW Registration. July
  12, 1985.

- 48. Texas Department of Water Resources, Industrial Solid
  Waste Compliance Monitoring Inspection Report. Re:
  Koppers Company, Inc. March 1985.
- 49. Texas Department of Water Resources Industrial Solid
  Waste compliance Monitoring Inspection Report. Re:
  Koppers Company, Inc. July 1985.
- 50. Texas Water Commission Solid Waste Compliance

  Monitoring Inspection Report. Re: Koppers Company,

  Inc. December 1986.
- 51. Inspection Checklist, Lois Inspections Region VI.
  Re: Koppers Company, Inc. 1985.
- 52. Texas Water Commission Solid Waste Compliance

  Monitoring Inspection Report. Re: Koppers Company,

  Inc. December 1986.
- 53. InterOffice Memorandum: Texas Depart of Water
  Resources. Re: Sampling Inspection Koppers Company,
  Inc. March 13, 1985.

- 54. Correspondence: Koppers Company, Inc. to Texas

  Department of Water Resources. Re: Groundwater

  Quality Assessment Plan. February 27, 1985.
- 55. Texas Department of Water Resources Industrial Solid
  Waste Compliance Monitoring Inspection Report. Re:
  Koppers Company, Inc. July 1985.
- Correspondence: Texas Water Commission to Koppers
  Company, Inc. Re: Groundwater Quality Assessment
  Plan. November, 1985.
- 57. Correspondence: Koppers Company, Inc. to Texas Water
  Commission. Re: Groundwater Quality Assessment
  Plan. December 5, 1985.
- 58. Correspondence: Texas Water Commission to Koppers
  Company, Inc. Re: Groundwater Quality Assessment
  Plan. November 5, 1985.
- 59. Correspondence: Texas Department of Water Resources to Koppers Company, Inc. Re: Industrial Solid Waste Compliance Inspection. July 12, 1985.

- 60. Correspondence: Koppers Company, Inc. to Texas Water Commission. Re: Excursion of Water Treatment Facilities. September 26, 1986.
- 61. Correspondence: Texas Water Commission to Koppers

  Company, Inc. Re: Improvement/Facility Addition for

  Wastewater Treatment. August 12, 1986.
- 62. Correspondence: U.S. Environmental Protection Agency to Koppers Company, Inc. Re: NPDES Permit No. TX0005096 Violation. July 23, 1986.
- 63. U.S. Environmental Protection Agency to Koppers

  Company, Inc. Re: Administrative Order Docket No.

  VI-86-76 Violation. October 16, 1986
- 64. Koppers Company, Inc., August 1986 Outfall. September 25, 1986.
- 65. Koppers Company, Inc., August 1986 Outfall. September 25, 1986.
- 66. Correspondence: U.S. Environmental Protection Agency to Koppers Company, Inc. Re: NPDES Permit No. TX0005096 Violation. September 3, 1986.

- 67. Koppers Company, Inc., Outfall July 1986. August 25, 1986.
- 68. Correspondence: Koppers Company, Inc. to Texas Water Commission. Re: TWC Permit No. WQ00001034. July 23, 1986.
- 69. Correspondence: Koppers to United States EPA. Re:
  Response to Administrative Order DOcket No.
  VI-86-076. May 14, 1986.
- 70. Correspondence Koppers Company, Inc. Re: Follow-up to telephone calls to TWC and EPA. December 10, 1986.
- 71. Texas Water Commission Comprehensive GW Monitoring
  Evaluation Report. Re: Koppers Company, Inc.
  December 1987.
- 72. Assessment: Koppers Company, Inc. November 10, 1986.
- 73. Fact Sheet: Koppers Company, Inc.
- 74. EPA Notification of Hazardous Waste Activity. Re:
  Koppers Company, Inc. December 2, 1986.

- 75. Correspondence: U.S. Environmental Protection Agency to Koppers Company, Inc. Re: Request for Information. February 28, 1986.
- 76. Correspondence: Texas Water Commission to U.S.

  Environmental Protection Agency. Re: Koppers

  Company, Inc. Full Facility Closure. April 29, 1986.
- 77. Texas Water Commission Industrial Discharge WWTP Inspection Report. Re: Koppers Company, Inc.
  January 22 & 23, 1986.
- 78. Memorandum from Fred Humke to Linda Thompson. Re:
  Koppers Co., Inc. September 8, 1986.
- 79. Correspondence: Texas Water Commission to State

  Department of Highways and Public Transportation.

  Re: Koppers Company, Inc. Spur 548 Hardy Toll Road

  Project. September 26, 1986.
- 80. Correspondence: Law Environmental Services to Texas
  Water Commission. Re: Transmittal of Revised Closure
  Plan and Cost Estimate Koppers Tar Plant. June 6,
  1986.

- 81. Correspondence: Texas Water Commission to Koppers
  Company, Inc. Re: Full Facility Closure. May 6,
  1986.
- 82. Correspondence: Law Environmental Services to TExas
  Water Commission. Re: Transmittal of Closure Plan
  and Cost Estimate. April 2, 1986.
- 83. Correspondence: Texas Water Commission to Koppers

  Company, Inc. Re: Full Facility Closure Hazardous

  Waste Surface Impoundment. July 22, 1986.
- 84. Memorandum: U.S. Environmental Protection Agency.

  Re: RCRA Compliance Monitoring Inspection Report,

  Koppers Company, Inc. August 28, 1986
- 85. Correspondence: Texas Water Commission to Koppers
  Company, Inc. Re: Solid Waste Registration No.
  30419. July 23, 1986.
- 86. Texas Water Commission Comprehensive GW Monitoring
  Evaluation Report. Re: Koppers Company Houston Tar
  Plant. October 5, 1986.

- 87. Koppers Company, Inc. Environmental Analysis

  Laboratory Quality Assurance Plan. February 24, 1986.
- 88. Correspondence: Texas Water Commission to U.S.

  Environmental Protection Agency. Re: Full Facility

  Closure Plan for Koppers Company, Inc. Houston Tar

  Plant. April 29, 1986.
- 89. Texas Water Commission Industrial Discharge WWTP Inspection Report. Re: Koppers Company, Inc. March
  26, 1987.
- 90. U.S. Environmental Protection Agency Administrative Order. Re: Koppers Company, Inc. Docket No. VI-87-1012. February 23, 1987.
- 91. Correspondence: Koppers Company, Inc. to Texas Water
  Commission. Re: Annual Compliance Inspection.
  August 17, 1987.
- 92. Correspondence: Koppers Company, Inc. to Water
  Quality Manager Southeast Region. Re: Response to
  Inspection Report. June 16, 1987.

- 93. Koppers Company, Inc. Outfall April 1987. May 20, 1987.
- 94. Koppers Company, Inc. Outfall July 1987. August 25, 1987.
- 95. Correspondence: Texas Water Commission to Koppers
  Company, Inc. Re: Deficiencies noted during
  Inspection. March 11, 1987.
- 96. Texas Water Commission Solid Waste Compliance

  Monitoring Inspection Report. Re: Koppers Company,

  Inc. March 1987.
- 97. Texas Water Commission Solid Waste Compliance

  Monitoring Inspection Report. Re: Koppers Company,

  Inc. February 1987.
- 98. Texas Water Commission Comprehensive GW Monitoring
  Evaluation Report. Re: Koppers Company Houston Tar
  Plant. September 1987.
- 99. Texas Water Commission Comprehensive GW Monitoring
  Evaluation Report. Re: Koppers Company Houston Tar
  Plant. September 1987.

- 100. Texas Water Commission Solid Waste Compliance

  Monitoring Inspection Report. Re: Koppers Company,

  Inc. February 1987.
- 101. Texas Water Commission Solid Waste Compliance

  Monitoring Inspection Report. Re: Koppers Company,

  Inc. February 20, 1987.
- 102. Texas Water Commission Notice of Registration
  Industrial Solid Waste Generation/Disposal. Re:
  Koppers Company, Inc. March 25, 1986.
- 103. Correspondence: Koppers Company, Inc. to U.S.

  Environmental Protection Agency. Re: Koppers Co.,

  Inc. Delist.Pet. August 1, 1984.
- 104. Texas Water Commission Industrial Discharge

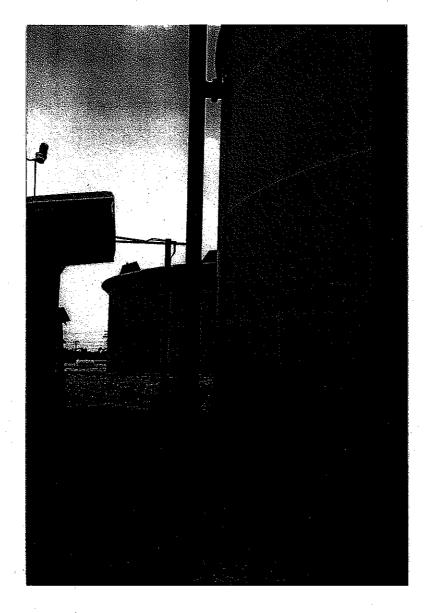
  WWTP-Inspection Report. Re: Koppers Company, Inc.

  March 1, 1988.
- 105. Correspondence: Koppers Company, Inc. to Texas Water
  Commission. Re: Oil and Grease Excursions Outfall
  001. March 10, 1988.

- 106. InterOffice Memorandum: Texas Water Commission. Re:
  Koppers Company, Inc. Compliance Evaluation
  Inspection. March 3, 1988.
- 107. Texas Water Commission Solid Waste Inspection Report.

  Re: Koppers Company, Inc. March 1988.
- 108. Groundwater Availability in Texas, Texas Department of Water Resources Report, No. 238, September 1979.
- 109. Harris Galveston Coastal Subsidence District Water
  Resource Management Program Phase I.

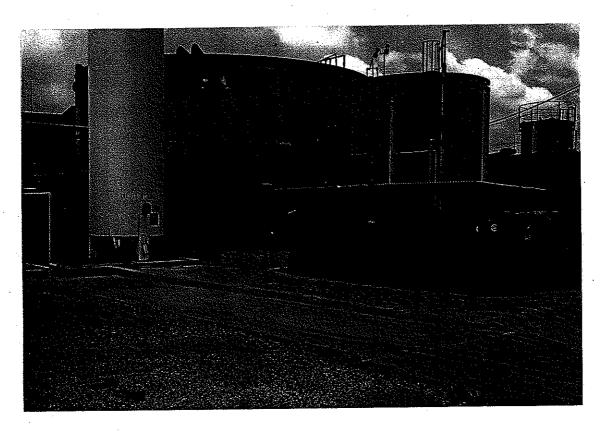
# APPENDIX A



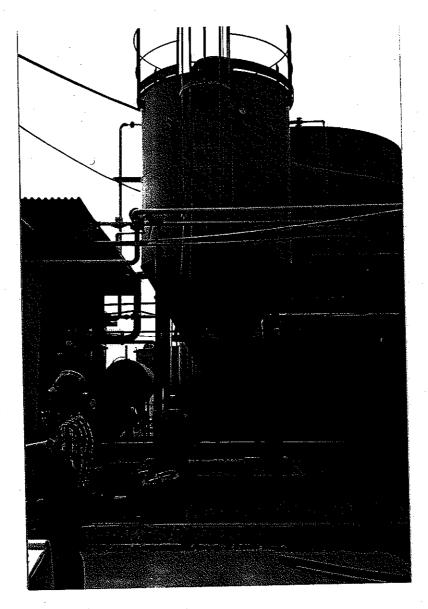
1. SWMU I - Stormwater Surge Tank, T-600 facing west. Note: Overflow pipe to ground. Barrel in foreground is "waste treatment" anti-foam.



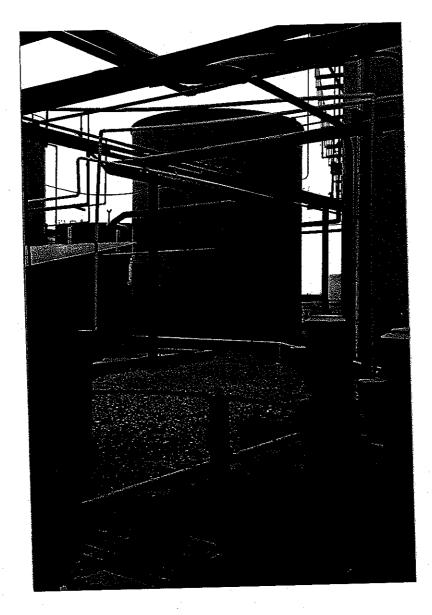
 SWMU 1 - Stormwater Surge Tank, T-600 facing northwest. Note: Inflow piping.



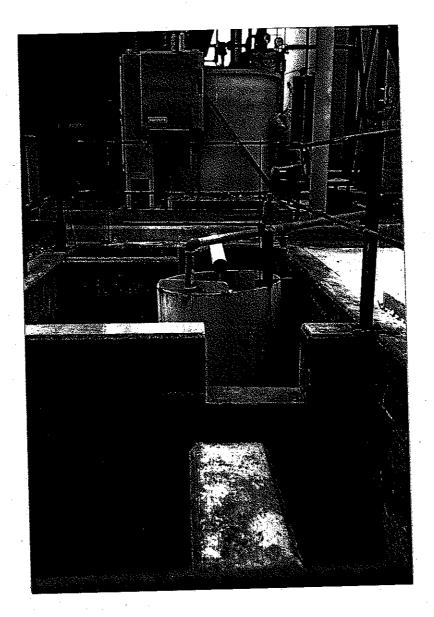
3. SWMU 1 - Stormwater Surge Tank, T-600 facing northwest. Note: SWMU 1 is largest tank in photo. Holding Tank (SWMU 3) is to right of photo and Dumpster Storage Area (SWMU 6) is in foreground.



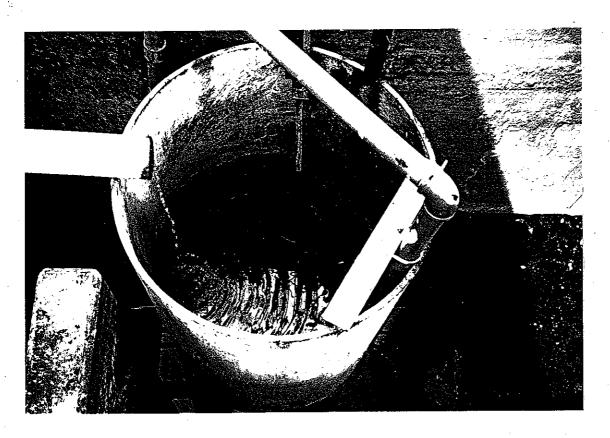
 SWMU 2 - Sludge Tank, T-630 facing south, southeast. Note: Concrete pad and curbing.



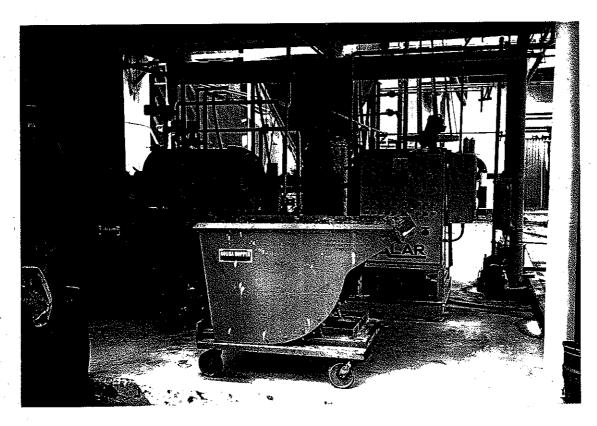
5. SWMU 3 - Holding Tank, T-660 facing north.



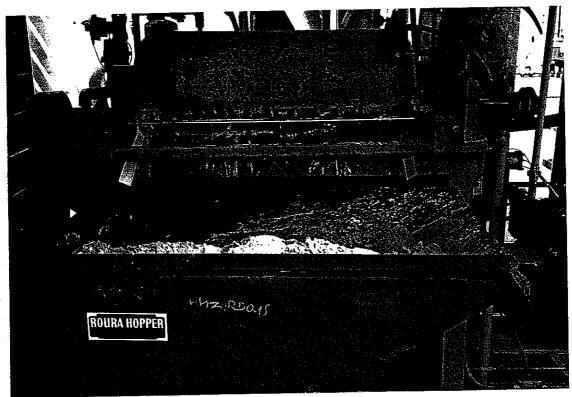
 SWMU 4 - Steel Tank Note: Concrete structure surrounding tank.



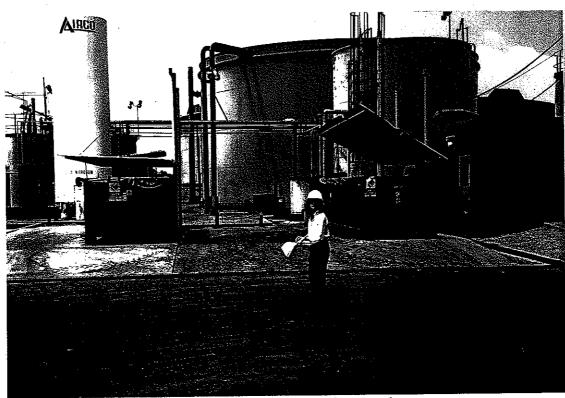
7. SWMU 4 - Steel Tank
Note: Float valve shut-off mechanism.



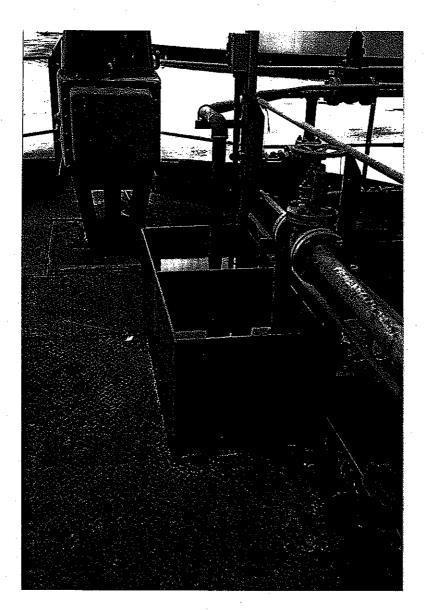
8. SWMU 7 - Hopper Storage Area facing west. Note: Concrete pad and curbing.



9. SWMU 7 - Hopper Storage Area facing west.



10. SWMU 6 - Dumpster Storage Area facing west.
Note: Concrete curbs and ramp. Stormwater
Retention Tank (SWMU 1) is in background;
Drumming Area Trench System (SWMU 21) is in
foreground.



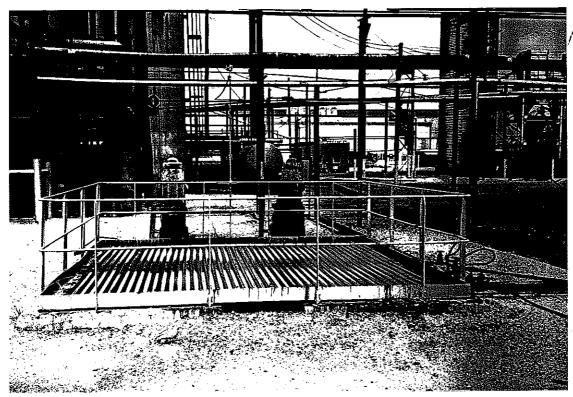
11. SWMU 8 - Aeration Tank. Note: Inlet discharge pipes on top of unit.



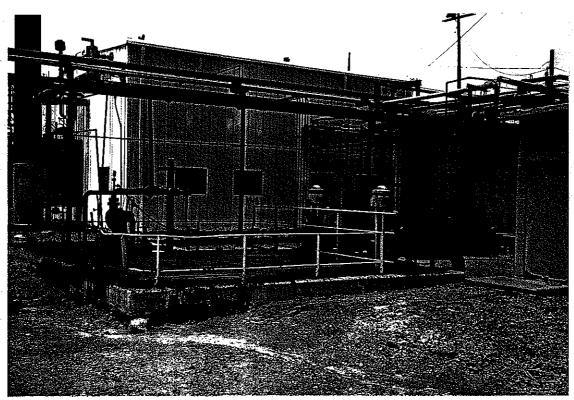
12. SWMU 8 - Aeration Basin (left), SWMU 9 - Clarifier (right) facing north. Note: Stormwater Retention Tank (SWMU 1) and Holding Tank (SWMU 3) in background; Surface Impoundment (SWMU 11) in foreground.



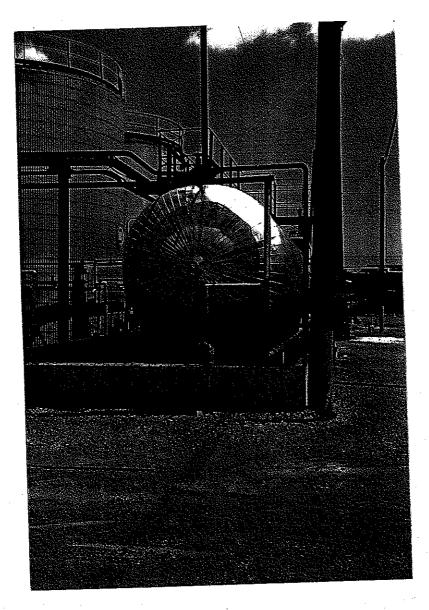
13. SWMU 11 - Surface Impoundment (Lagoon) facing south.
Note: Red groundwater monitoring wells. Land Irrigation
Area (SWMU 10) is in background.



14. SWMU 12 - Sump S-500 facing north. Note: Aluminum cover and automatic pumping and alarm system. Process Area Trench System (SWMU 22) is to right of unit.



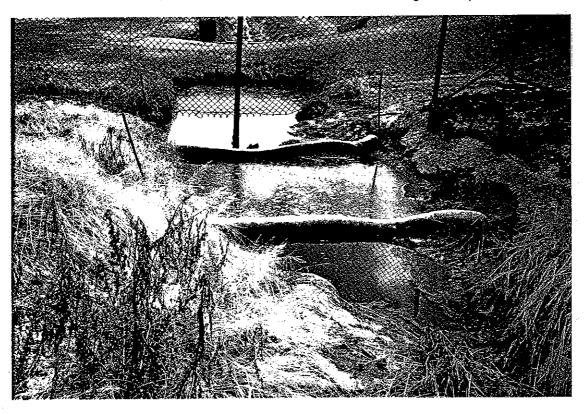
15. SWMU 13 - Sump S-400 facing west. Note: Aluminum cover and automatic pumping and alarm system. Process Area Trench System (SWMU 22) is in background.



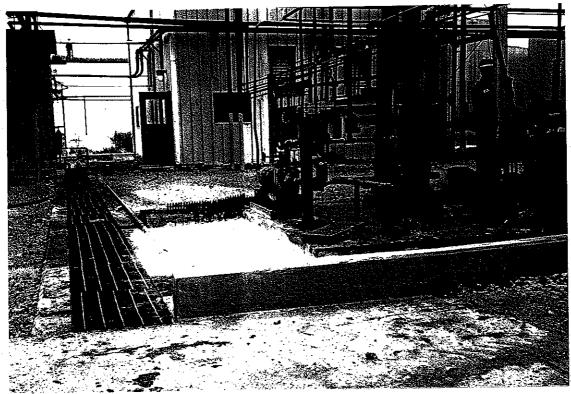
16. SWMU 15 - Decanter Tank facing east. Note: Concrete curbing.



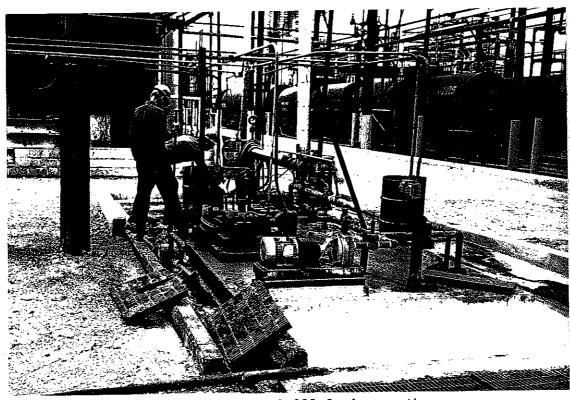
17. SWMU 16 - Effluent Ditch facing south. Note: Groundwater monitoring well and concrete dike cover (Tank Farm Area - SWMU 21) to right of photo.



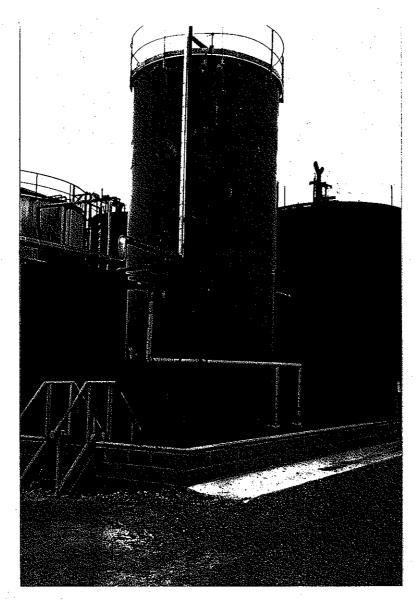
18. SWMU 16 - Effluent Ditch facing south. Note: Oil booms in ditch at property line and outfall OOl.



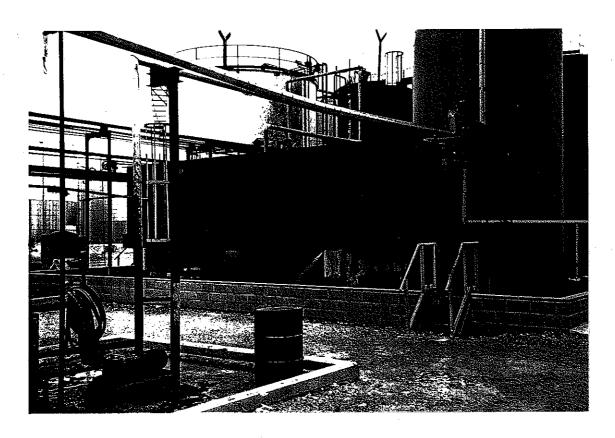
19. SWMU 18 - Concrete Sump, S-200 facing west. Note: Concrete curbing and Process Area Trench System (SWMU 22).



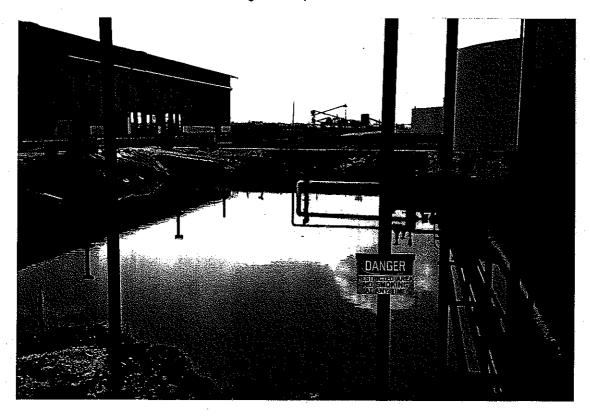
20. SWMU 18 - Concrete Sump, S-200 facing south.



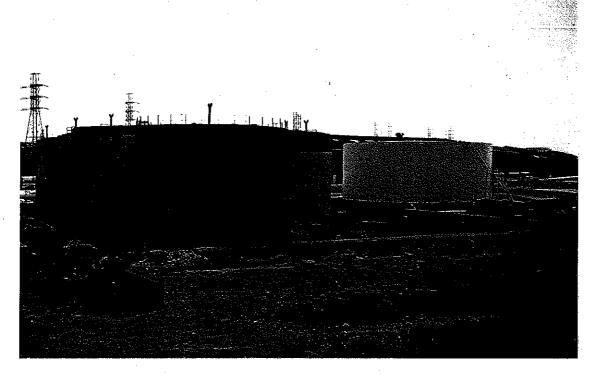
21. SWMU 20 - Retention Tank facing southwest. Note: Concrete containment. API Separator (SWMU 17) is to left in photo.



22. SWMU 17 - API Separator facing southwest.
Note: Concrete containment. Retention Tank
(SWMU 20) is to right in photo.



23. Area of Concern B - Tank Farm Area facing south, southeast. Note: Standing water, stains on concrete dike, erosion of dike.



24. Area of Concern B - Tank Farm Area facing southeast. Surface Impoundment (Lagoon - SWMU 11) is in foreground.



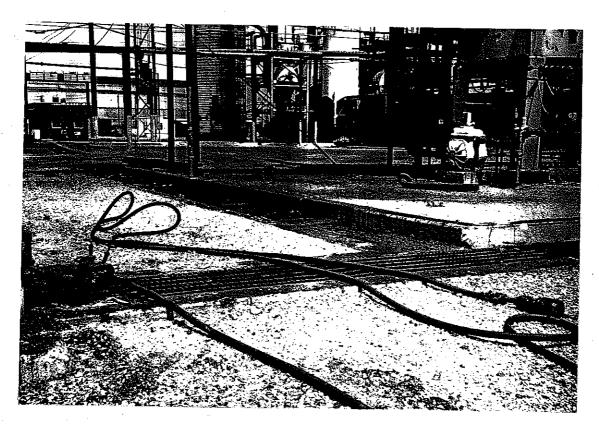
25. Area of Concern B - Tank Farm Area facing southeast. Photo is of area inside diking on south side of unit.



26. SWMU 21 - Drumming Area Trench System facing west.



27. SWMU 21 - Drumming Area Trench System facing east. Note: Product spills and wastewater run-off to system.



28. SWMU 22 - Process Area Trench System facing northwest. This unit discharges to Sump S-500 (SWMU 12) just out of photo to left.



29. Area of Concern A - Tank Car Loading/Unloading Area facing east.

# APPENDIX B

#### VISUAL SITE INSPECTION TRIP SUMMARY

The Visual Site Inspection (VSI) was conducted by the A. T. Kearney Team on August 9, 1988. It was a sunny, hot day with temperatures reaching 98°F.

The A. T. Kearney Team consisted of Elani Gray and Jeffrey
Haag of Harding Lawson Associates. The facility was
represented by Kevin Fitzgerald, Plant Manager, Walt Geels,
Assistant Plant Manager, and Jordan Dern, Keystone
Laboratories, consultant to the Koppers Company.

Upon arrival at the facility at 8:30 a.m., the Kearney Team met with facility representatives to discuss the VSI agenda, specific safety requirements and review facility operations. The entire facility was toured by foot. Upon conclusion of the VSI, an exit meeting was held to summarize further information needed and locate SWMUs on a facility map.